UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,659	11/21/2003	Jean-Francois Saint Etienne	245501US41X CONT	9048

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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER
HOSSAIN, TANIM M

ART UNIT	PAPER NUMBER
2145	

NOTIFICATION DATE	DELIVERY MODE
09/24/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/717,659	SAINT ETIENNE, ET AL
	Examiner	**Art Unit**	
	Tanim Hossain	2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>22 June 2007</u>.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-20</u> is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-20</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All b)☐ Some * c)☐ None of:

   1. ☐ Certified copies of the priority documents have been received.

   2. ☐ Certified copies of the priority documents have been received in Application No. _____.

   3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____ .

DETAILED ACTION

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 2, 7, 8, 15, and 16 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 2 of copending Application No. 10/288,025. Although the conflicting claims are not identical, they are not patentably distinct from each other because it would have been obvious to one of ordinary skill in the art to modify the claims of the copending application to include the added functionality of the claims of the instant application.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

As per claims 1, 7, and 15, Application No. 10/288,025 teaches a process for checking

the deterministic behavior of a packet switching network comprising subscriber stations

connected to each other through at least one switch, this behavior being said to be deterministic

in the sense that any packet sent on the network from a source subscriber station reaches the

destination subscriber station(s) within a duration that is limited in time, and characterized in that

a relation (by the given equation) is satisfied for each output port from each switch on the

network, in which the max latency value is the maximum residence time in the output buffer of a

switch, this value may be different for each switch in the network; BAGi is the minimum time

between two consecutive frames belonging to a vertical link I, before they are transmitted on the

physical support; (Jitter In)I is the Jitter associated with a virtual link I that represents the time

interval between the theoretical instant at which a frame is transmitted, and its effective

transmission which may be before or after the theoretical instant; (max frame duration)I is the

duration of the longest frame on the virtual link I. The copending application does not

specifically teach the determination of these values, or a determination unit, and then if the

relation is not satisfied, a user is notified (through a notification unit) that said packet switching

network is not deterministic. It would have been obvious to one of ordinary skill in the art at the

time of the invention to include the determination, through a determination unit, of the

aforementioned values and notifying the user, through a notification unit, of a non-satisfaction of

the relation. The motivation for doing so lies in the fact that for the values to be useful, they

would have to be determined at some point by some entity, and notifying the user of a non-

satisfaction of a relation would allow for measures to be taken by the user, for example. As

such, it would have been obvious to modify claim 1 of the copending application to arrive at the teachings of claims 1, 7, and 15 of the instant application.

As per claims 2, 8, and 16, Application No. 10/288,025 teaches a process in which the virtual links are added one by one, checking that the behavior of the entire network remains deterministic after each addition of a virtual link. The copending application does not specifically teach the determining of each output port after each addition of a virtual link. It would have been obvious to include this limitation into the copending application, as the determining of each output port would allow for a more versatile and thorough system for example.

As per claim 13, Application No. 10/288,025 teaches the process according to claim 1, but does not specifically teach that the jitter refers to max jitter. It would have been obvious to one of ordinary skill in the art at the time of the invention to include the use of max jitter, as having the worst-case scenario for jitter would allow for a better representation as to whether a system is deterministic during a situation in which the worst-case scenario occurs. This would allow for a measure of whether the system is still deterministic despite the maximum possible jitter, which would allow for a more useful calculation, since it would be a measure of a threshold (determinism in view of maximum jitter), for example.

As per claim 14, Application No. 10/288,025 teaches the process according to claim 11, but does not specifically teach the aggregating of the virtual links without causing a loss of segregation. It would have been obvious to one of ordinary skill in the art at the time of the invention to include the ability to add the links without causing a loss of segregation, so as to keep track of the separate links individually, to allow for more efficient bookkeeping.

Claims 3-6, 9-12, and 17-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 2 of copending Application No. 10/288,025 in view of Honcik (U.S. 5,761,625).

As per claims 3, 9, and 17, Application No. 10/288,025 teaches the process and method of claims 1, 7, and 15, but does not specifically teach that the packet switching network is located on an aircraft. Honcik teaches the use of a packet switching network on an aircraft (column 11, lines 12-15). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the use in an aircraft of the network, as taught by Honcik in the system of the copending application. The motivation for doing so lies in the fact that allowing for a deterministic network on an aircraft would allow for further accuracy in accounting for flight parameters. The network would enable a more thorough analysis of possible situations, and would allow for the aircraft to stay informed of potentially important parameters.

As per claims 4, 10, and 18, Application No. 10/288,025 teaches the process and method of claims 1, 7, and 15, but does not specifically teach that the network includes a switch connected to two graphic screens. Honcik teaches that the packet switching network includes a first switch connected to a first graphic screen and a second graphic screen (figure 3; column 8, lines 1-19). It would have been obvious to one of ordinary skill in the art at the time of the invention to include that the network connects to graphic screens. The motivation for doing so lies in the fact that given the determinism is determined for an aircraft, it would be advantageous to the users to have a display of the processes taking place to better plan for certain events or monitor situations. Graphic screens would allow for this task.

As per claims 5, 11, and 19, Application No. 10/288,025 in view of Honcik teaches that the packet switching network includes a second switch connected to a flight parameters generator and an aircraft maintenance computer (Honcik: column 11, lines 12-15).

As per claims 6, 12, and 20, Application No. 10/288,025 in view of Honcik teaches that the first graphic screen displays flight parameters and the second graphic screen displays flight and maintenance parameters (Honcik: figure 3; column 11, lines 12-15).

This is a provisional obviousness-type double patenting rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanim Hossain whose telephone number is 571/272-3881. The examiner can normally be reached on 8:30 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on 571/272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tanim Hossain
Patent Examiner
Art Unit 2145

JASON CARDONE
SUPERVISORY PATENT EXAMINER